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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/495,799	02/01/2000	Christian A. Gilmore	1999-0225	5305

7590 01/28/2004

Samuel H Dworetsky
AT&T Corp
P O Box 4110
Middletown, NJ 07748-4110

EXAMINER	
MAHMOUDI, HASSAN	

ART UNIT	PAPER NUMBER
2175	

DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/495,799	GILMORE ET AL.	
	Examiner	Art Unit	
	Tony Mahmoudi	2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 November 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

DIANE D. MIZRAHI
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Remarks

1. In response to communications filed on 12-November-2003, claims 1 and 6 are amended, and new claims 14-22 are added per applicant's request. Therefore, claims 1-22 are presently pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that said subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 5-10, and 14-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brownell (U.S. Pub. No. 2002/0169980) in view of Crichton et al (U.S. patent No. 6,104,716.)

As to claim 1, Brownell teaches a method of providing access (see Abstract) to a server inside a firewall (see figure 3; paragraph 1; and see paragraph 77) comprising the steps of:

receiving at a first proxy outside the firewall a connection request from a client (see paragraph 62) that is also outside the firewall (see Abstract, where "client is also outside the firewall" is read on "a user on an external host logs in into a firewall", and see paragraph 99);

sending the connection request through the firewall (see paragraph 99, where a first connection from the client to the firewall, and a second connection from the firewall to the inside host is discussed), over a control channel previously established (see paragraph 52) by a second proxy inside the firewall (see paragraphs 78 and 99); and

authenticating the client (see paragraph 68.)

Brownell does not teach:

the second proxy authenticating the client; and

the second proxy establishing a data connection with the first proxy, through the firewall, through which the first proxy can forward requests of the client to the second proxy.

Crichton et al teaches a communication protocol across one or more firewalls (see Abstract), in which he teaches:

the second proxy authenticating the client (see column 2, lines 26-27; column, and see column 6, lines 16-39);

the second proxy establishing a data connection with the first proxy, through the firewall (see column 2, lines 32-55, and see column 5, lines 17-25, where "data connection" is read on "initiate a connection and passes data"), through which the first proxy can forward requests of the client to the second proxy (see column 4, lines 42-50, and see column 6, lines 40-47.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brownell to include the second proxy authenticating the client; and the second proxy establishing a data connection with the first

proxy, through the firewall, through which the first proxy can forward requests of the client to the second proxy.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brownell by the teachings of Crichton et al, because including the second proxy authenticating the client; and the second proxy establishing a data connection with the first proxy, through the firewall, through which the first proxy can forward requests of the client to the second proxy, would enable the system to authenticate the authorized users and ensure that the users requests and received by the firewall through the first proxy, and forwarded to the appropriate destinations via the second proxy, in order to provide an end-to-end connection between the users and the systems, as taught by Crichton et al (see column 2, lines 32-41, and see column 4, lines 42-50.)

As to claim 2, Brownell as modified teaches the method further comprising the step of receiving a requested resource at the second proxy from the server inside the firewall (see Brownell, paragraphs 77-78) and using the established connection between the second proxy and the client to forward the requested resource to the client (see Brownell, figure 3; paragraph 50, where "requested resource" is read on "web page", and see paragraphs 100-102.)

As to claim 3, Brownell as modified teaches wherein the resource is a document containing hyperlinks to other resources (see Brownell, paragraph 50, where "document containing hyperlinks to other resources" is read on "web page".)

As to claim 5, Brownell as modified teaches wherein the document is a Web page (see Brownell, paragraph 50.)

As to claim 6, Brownell as modified teaches wherein the data connection (see Brownell, paragraph 45, where "data connection" is read on "a two-way data communication") uses a secure communication protocol (see Brownell, paragraph 49; page 5, paragraphs 58, 60, and 65.)

As to claim 7, Brownell as modified teaches wherein the secure communication protocol is SSL (see Brownell, paragraph 67, and see Crichton et al, column 6, lines 24-39.)

As to claim 8, Brownell as modified teaches wherein the client is a browser (see Brownell, paragraph 50) and the server is a Web server (see Brownell, paragraph 50, where "web server" is read on "servers that participate in the World Wide Web".)

As to claim 9, Brownell as modified teaches wherein the client is authenticated using a password mechanism (see Brownell, paragraph 70, where "password" is read on "passphrase".)

As to claim 10, Brownell as modified teaches wherein the client is authenticated using a onetime password mechanism (see Brownell, paragraph 71, where "one time password mechanism" is read on "challenge/response authentication".)

As to claim 14, Brownell as modified teaches the method further comprising the step of receiving at the second proxy, in response to the request for a resource from the second proxy (see Crichton et al, column 2, lines 32-55), the requested resource from the server inside the firewall (see Crichton et al, column 6, line 66 through column 7, line 5) and using the established connection between the second proxy and the client to forward the requested resource to the client (see Crichton et al, column 4, lines 42-50, and see column 6, lines 40-47.)

As to claim 15, Brownell et al as modified teaches the method further comprising the step of receiving from the first proxy, at the second proxy (see Crichton et al, column 6, lines 24-47) , a request for a resource of the server (see Crichton et al, column 4, lines 42-50, and see column 6, lines 40-47.)

As to claim 17, Brownell as modified teaches wherein the client is authenticated (see Brownell, paragraph 68, and see Crichton et al, column 2, lines 26-27; column, and see column 6, lines 16-39) via the control channel (see Brownell, paragraph 52) using a password mechanism (see Brownell, paragraph 70, where "password" is read on "passphrase".)

As to claim 18, Brownell as modified teaches wherein the control channel is maintained by sending a command that requests a response, over the control channel, at intervals that insure a silent period of no more than a pre-selected value (see Brownell, paragraphs 76-78.)

As to claim 19, Brownell as modified teaches wherein the control channel is adapted to carry a limited number of different messages (see Crichton et al, column 6, line 40 through column 9, line 67.)

As to claim 20, Brownell as modified teaches wherein the control channel is adapted to carry messages from a set that consists of

a message sent by the second proxy to establish the control channel (see Crichton et al, column 6, line 63 through column 7, line 5),

a message sent by the first proxy to request establishment of the data connection (see Crichton et al, column 7, lines 6-9),

a hailing message that expects a reply (see Crichton et al, column 7, lines 10-28), and

a reply message that acknowledges the hailing message (see Crichton et al, column 7, lines 29-34.)

As to claim 21, Brownell as modified teaches the step of establishing the data connection is followed by a step of the second proxy sending a message to the first proxy, over the data connection, to inform the first proxy of the establishment of the data connection (see Crichton et al, column 7, lines 10-14, and see column 8, lines 24-52.)

As to claim 22, Brownell as modified teaches wherein the control channel is maintained by periodically one of the proxies sending a command that requests a response from the other one of the proxies (see Crichton et al, column 6, line 62 through column 7, line 9.)

4. Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brownell (U.S. Pub. No. 2002/0169980) in view of Crichton et al (U.S. patent No. 6,104,716), as applied to claims 1-3, 5-10, and 14-22 above, and further in view of Malcolm (U.S. patent No. 6,256,631.)

As to claim 4, Brownell as modified teaches the second proxy (see Brownell, paragraph 100, and see paragraph 120.)

Brownell as modified still does not teach translating the hyperlinks in the document into references.

Malcolm teaches a method of automatic creation of hyperlinks (see Abstract), in which he teaches translating the hyperlinks in the document into references (see column 5, lines 22-42.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brownell as modified, to include translating the hyperlinks in the document into references.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brownell as modified, by the teaching of Malcolm,

because translating the hyperlinks in the document into references, would enable the system to generate references from hyperlinked documents, in order for the users to easily retrieve the referenced documents.

As to claim 16, Brownell et al as modified teaches wherein the connection request comprises a URL (see Malcolm, column 2, lines 49-51), the method further comprising the second proxy executing the step of

Translating the URL to a URL that corresponds to a URL of a server inside the firewall (see Malcolm, column 5, lines 32-42, and see column 8, lines 18-22); and

establishing a connection with the URL (see Malcolm, column 6, lines 12-20.)

5. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brownell (U.S. Pub. No. 2002/0169980) in view of Malcolm (U.S. patent No. 6,256,631.)

As to claim 11, Brownell teaches a method of providing a client access (see Abstract) to a resource stored behind a firewall (see figure 3; page 1, paragraph 1; and see pages 6-7, paragraph 77) comprising the steps of:

parsing the resource for hyperlinks to other resources behind the firewall (see page 4, paragraph 50, where "resources for hyperlinks" is read on "web page"); and

transmitting the resource to the client (see page 4, paragraph 50, where "resource" is read on a "web page".)

Brownell does not teach rewriting the hyperlinks to point to a proxy enabled to access resources behind the firewall.

Malcolm teaches a method of automatic creation of hyperlinks (see Abstract), in which he teaches rewriting the hyperlinks to point to a proxy enabled to access resources behind the firewall (see column 5, line 60 through column 6, line 2.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brownell to include rewriting the hyperlinks to point to a proxy enabled to access resources behind the firewall.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brownell by the teaching of Malcolm, because rewriting the hyperlinks to point to a proxy enabled to access resources behind the firewall, would enable users to locate newly generated documents, identified by the system's re-writing of the document's hyperlinks.

As to claim 12, Brownell as modified teaches wherein the resource is a Web page (see Brownell, page 4, paragraph 50.)

As to claim 13, Brownell as modified teaches wherein the rewritten hyperlinks (see Malcolm, column 5, lines 22-42) also comprise security information (see Brownell, page 4, paragraph 49; page 5, paragraphs 58, 60, and 65.)

Response to Arguments

6. Applicant's arguments filed on 12-November-2003 with respect to the rejected claims in view of the cited references have been fully considered but they are moot in view of the new grounds for rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (703) 305-4887. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

tm

January 13, 2004

DIANE D. MIZRAHI
PRIMARY PATENT EXAMINER
TECHNOLOGY CENTER 2100